

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003142**Date Inspected:** 01-Jul-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chen Chih-Ming**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG side, bottom and deck panels**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG new assembly bay 2

QA noted that ZPMC Ultrasonic Testing (UT) technicians rejected the following welds on OBG segment 3A: SEG-025A-005 and 006, SEG-014A-011 and SEG-014A-020.

QA performed 10% Ultrasonic Testing (UT) R1 repair verification on the following OBG segment 3AE weld joint: SSD17-PP021-013. This weld appeared to be compliant with AWS D1.5 2002 and the contract documents.

QA observed ZPMC qualified welding personnel SMAW tack welding SEG-027B-001 SP-121 to SP-094A following the guide lines of WPS-B-2211-B-U2. QC monitored the welding process continuously throughout the evening. The welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 24 Amps: 182 Travel speed: 102mm/min

Welder ID: 066179

QA observed ZPMC qualified welding personnel SMAW welding in the 4G position 30 R1 UT repairs on the following side to bottom panel joint: SEG-013A-031 following the guide lines of ZPMC approved repair

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

procedure as defined in ZPMC WQCP section 9 and WPS-B-P-2214-TC-U4b-FCM and recorded on weld repair report# B-WR485. QC monitored the welding process continuously throughout the evening. The welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 24 Amps: 172 Travel speed: 132mm/min

Welder ID: 066258

Welder ID: 037996

QA observed ZPMC qualified welding personnel SMAW SEG-020-019 SP-008A to BP-022A following the guide lines of WPS-B-P-2214-TC-U4b-FCM. QC monitored the welding process continuously throughout the evening. The welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 25 Amps: 172 Travel speed: 133mm/min

Welder ID: 058551

Welder ID: 067756

Other general observations include ZPMC personnel fitting and welding OBG temporary support columns, grinding and weld bevel prep on various OBG components.

### Summary of Conversations:

Only general conversations were held between QA and QC concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Patrick Lowry (858)-344-2712, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Hall,Steven	Quality Assurance Inspector
----------------------	-------------	-----------------------------

---

<b>Reviewed By:</b>	Cuellar,Robert	QA Reviewer
---------------------	----------------	-------------